Programmatic Environmental Assessment Commonwealth of Puerto Rico Utility Repair, Replacement, And Realignment FEMA-4339-DR-PR

1.0 Background

The mission of the Federal Emergency Management Agency (FEMA) is to reduce the loss of life and property and protect our institutions from all hazards by leading and supporting the nation in a comprehensive, risk-based emergency management program of mitigation, preparedness, response, and recovery. Beginning September 17, 2017, Hurricane Maria caused significant damages to Puerto Rico ("Commonwealth"). President Donald J. Trump issued a disaster declaration for Hurricane Maria on September 20, 2017 encompassing the entire territory. The declaration authorized federal public assistance to affected communities and certain non-profit organizations per FEMA, and in accordance with the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1974 (42 USC 5172) as amended; the Sandy Recovery Improvement Act of 2013; and the Bipartisan Budget Act of 2018 (Public Law 115-123). The Central Office of Recovery, Reconstruction and Resiliency is the Recipient for FEMA grants and multiple agencies may be Subrecipient for specific projects.

This Programmatic Environmental Assessment (PEA) is prepared in accordance with Section 102 of the National Environmental Policy Act (NEPA) of 1969, as amended; and the Regulations for implementation of the NEPA (40 Code of Federal Regulations [CFR] Parts 1500 to 1508). The purpose of this PEA is to consider the potential environmental impacts of potential project alternatives, including a no action alternative, and to determine whether to prepare a Finding of No Significant Impact (FONSI) or an Environmental Impact Statement. In accordance with above referenced regulations and FEMA Directive 108-1 and FEMA Instruction 108-1-1, FEMA, during the decision-making process, evaluates and considers the environmental consequences of major federal actions it funds or undertakes.

If a proposed project meets the scope, impacts, and mitigation covered in this PEA, then FEMA will only prepare a record of environmental consideration (REC) as required, in addition to all applicable federal, state, and local consultations and permits. FEMA will prepare a REC for projects that meet FEMA's statutory or categorical exclusions that otherwise do not necessitate higher levels of NEPA review. If the scope of an action triggers additional analysis, FEMA will engage in the appropriate analysis or consultation requirement, prepare a REC, a tiered Environmental Assessment (EA), or Supplemental EA (SEA) under this PEA with the additional information.

2.0 Purpose and Need

Hurricane Maria's wind, rain, and floodwater damaged many of the Commonwealth's utilities. The purpose of this action is to provide grant funding to restore damaged utilities and increase their resiliency for future weather events. Under the Stafford Act, FEMA has authority to provide funding for cost-effective hazard mitigation and resiliency measures for facilities damaged by Hurricane Maria. Additionally, FEMA is authorized to provide funding to eligible grant Recipient

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and Subrecipients for cost-effective activities that have the purpose of reducing or eliminating risks to life and property from hazards and their effects. In addition, the Public Assistance Alternate Procedures provided by the Bipartisan Budget Act of 2018 along with Stafford Act sections 404 and 406 hazard mitigation encourage flexibility in recovery. Geography, climate, and demographic trends have led to the development of a complex infrastructure of utility systems across Puerto Rico. Aging infrastructure, the need for increased capacity, and damage due to disaster events all have the potential to limit the ability of these utility systems to function as designed. Failure of these systems can cause injury, loss of life, and environmental issues. For example, failing transmission lines may start fires or present an electrocution risk, or waste systems may discharge pollutants into waterways. Should utility systems fail, local governments may be unable to provide critical services including fire suppression, emergency communication, power generation, potable water, and wastewater treatment. Additionally, the lack of utilities such as electricity and water can be life-threatening for at-risk populations like the elderly, young, and the sick. In an effort to restore these services and/or mitigate these impacts, federal agencies led by FEMA may provide funds for utility system restoration, replacement, upgrade, expansion, redesign, or relocation.

The need for the action is to re-establish a safe and reliable network of utilities (through repair, replacement, or relocation) in order to reconnect the communities affected by the storm with safe and efficient delivery of energy, water, sewer service, and communications, and help reduce the potential for future damages by upgrading damaged utilities in accordance with current engineering codes and standards. The grant funding is necessary to address these concerns and reduce the damage and disruption caused by future disasters throughout the Commonwealth.

3.0 Classes of Actions and Evaluated Alternatives

This PEA addresses the overall programmatic impacts and effects for the expected large number of utilities projects that the Recipient and Subrecipient either has submitted or will submit for FEMA grant funding. The utilities covered under this PEA are defined as: water storage facilities, water pump stations, treatment plants for potable water/wastewater and their delivery systems; supplemental power generation, transmission, and distribution facilities, including, but not limited to, wind turbines, solar farms, generators, substations, and power lines; natural gas transmission and distribution facilities; stormwater, sewage, and wastewater collection systems and treatment plants; and communication systems The PEA analyzes four alternatives including Alternative 1: No Action Alternative; and the Programmatic Actions:

- Alternative 2: Repair, Replacement, and Upgrade of Utilities,
- Alternative 3: Realignment or Relocation of Utilities, and
- **Alternative 4**: A combination of all the Alternatives.

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4.0 Summary of Potential Impacts and Mitigation

FEMA anticipates that the Conditions and Permits listed in this FONSI would minimize impacts from projects covered under this PEA to below the level of major. Many potential sites may be within the floodway or 100-year floodplain, and within or near wetlands. FEMA would conduct the 8-Step Decision-Making Process in accordance with Executive Orders 11988 and 11990, as well as 44 CFR Part 9. Many of the actions undertaken as part of this PEA would have a positive effect on floodplains as they would improve the hydraulic flow and protect development from flooding. Mitigation may include raising structures above flood levels, relocating, or otherwise minimizing their effect on floodplain or wetlands. Avoidance and mitigation measures would minimize any adverse impacts to floodplains and wetlands.

If a proposed project is likely to impact Waters of the United States, the Recipient and Subrecipient would be responsible for obtaining all applicable federal, Commonwealth, and local permit approvals. The implementation mitigation measures and erosion controls would minimize water quality impacts by limiting sediment escapement and retaining turbid waters within project areas.

Proposed actions in the Commonwealth-defined coastal zone are subject to review in accordance with the Coastal Zone Management Act and Puerto Rico Coastal Zone Management Program and Policies. Pursuant to Federal Consistency Regulations at 15 C.F.R. § 930, FEMA and the Puerto Rico Planning Board (PRPB) signed a Federal Consistency Certificate for Category C through G work dated October 3, 2018 (Resolution JP-2018-324). FEMA will submit Federal Coastal Zone Consistency Determinations for scopes of work not included in the resolution to the PRPB for concurrence.

FEMA will review potential scopes of work covered under this PEA in accordance with the Clean Air Act. FEMA anticipates that construction emissions will be below threshold levels. Recipient and Subrecipient would adherence to work hours, adherence to noise ordinances and regulations, as well as the use of best management practices during construction will minimize noise, dust, and potential traffic disruptions.

FEMA Historic Preservation professionals will determine if a project scope of work meets outlined programmatic allowances from the Programmatic Agreement with the Puerto Rico State Historical Preservation Office (SHPO) or requires standard 106 review and consultation. If the scope of work is an applicable allowance, the project will be determined by FEMA to be compliant with Section 106 of NHPA and the review process will be complete. If the proposed scope of work does not fall within the allowances, FEMA will determine the effect and initiate consultation with the SHPO per the standard Section 106 review process. Additional archaeological surveys of ground disturbing activities may be required depending on consultation with the SHPO.

The actions covered by this PEA are not expected to adversely affect federally listed or proposed threatened and endangered species or their designated critical habitat (DCH). This PEA does not include any actions that would create a level of impact beyond not likely to adversely affect federally listed species or have an adverse modification to DCH. Any such action that would cause

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an impact beyond not likely to adversely affect will require FEMA to perform additional NEPA compliance. The actions covered under this PEA may temporarily displace local wildlife during construction; however, landscape restoration would restore wildlife habitat following completion of utility projects.

5.0 Public Involvement

This Utilities PEA is available for agency and public review and comment for a period of 30 days. The public information process will include a public notice with information about the proposed action in the newspaper *Primer Hora* with targeted outreach to environmental justice populations through notices to community organizations. The publicly available materials will include a Spanish translation of the PEA. The Utilities PEA is available for download at https://www.fema.gov/media-library and https://recovery.pr/es/document-library. The FEMA Puerto Rico Facebook, Inc. page will contain a website link for this Utilities PEA.

6.0 Permits & Conditions

The Recipient and Subrecipient are responsible for obtaining all applicable Federal, State, and local permits and other authorizations for project implementation prior to construction and adherence to all permit conditions. Any substantive change to the approved scope of work will require re-evaluations by FEMA for compliance with NEPA and other laws and EOs. The Recipient or Subrecipient must also adhere to the following conditions during project implementations and consider the below conservation recommendations. Failure to comply with grant conditions may jeopardize Federal funds:

- 1. **The Recipient and Subrecipient**: Must comply with all applicable environmental and historic preservation laws. Federal funding is contingent upon acquiring all necessary Federal, State and Local permits. Noncompliance with this requirement may jeopardize the receipt of federal funds.
- 2. **Stormwater and Soils**: Under the USEPA NPDES, any project disturbing more than one acre requires a USEPA Construction General Permit, an NPDES Permit, and a SWPPP. The permits and plan require BMPs which serve to protect soils, in addition to stormwater. Recipient and Subrecipient are required to: manage any piles of soil or debris, minimize steep slope disturbance, preserve native topsoil unless infeasible; and minimize soil compaction and erosion (USEPA 2018).
- 3. **Erosion and Sediment Control**: Each project will implement the BMPs and guidelines recommended in the Puerto Rico Erosion and Sediment Control Handbook for Developing Areas (PREQB-PR & USDA-NRCS). All necessary permits such as NPDES must be obtained and required plans (i.e. SWPPP) implemented.
- 4. **Endangered Species Act**: All projects will comply with and implement the ESA conditions found in any FEMA programmatic consultation that applies, or those conditions from a project-specific consultation. Any actions that may adversely federally listed

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species or designated critical habitat. Impacts not resolved through consultation, will require individual NEPA compliance.

- 5. Work Affecting Water: Any work that may affect waters of the United States will be consulted on with the USACE. The Recipient and Subrecipient are responsible for obtaining appropriate permits prior to the beginning of work, and implementing all requirements of the permits, including pre-construction notification.
- 6. **Floodplain**: For FEMA funded projects that are within or may affect a floodplain, FEMA will apply the 8-step Decision-Making Process. FEMA will assess short- and long-term effects to floodplains and apply applicable avoidance, minimization, and mitigation measures to limit impacts to less than major. FEMA will consider projects in the V-Zone, those with potential major or greater impacts, or those with the potential to increase flood elevations on a case-by-case basis for whether this PEA applies, or to prepare a tiered EA or SEA. Projects must also comply with Commonwealth floodplain and flood risk regulations.
- 7. **Wetlands**: For FEMA funded projects that are within or may affect a wetland, FEMA will apply the 8-step Decision-Making Process. FEMA will assess short- and long-term effects to wetlands and apply applicable avoidance, minimization, and mitigation measures to limit impacts to less than major.
- 8. **Historic Preservation/Archaeological Resources**: For FEMA-funded projects, FEMA will review for any historic/archaeological resources on or eligible for the National Register of Historic Places. If there is potential to affect historic/archaeological resources, the stipulations from the FEMA/SHPO Puerto Rico 2nd Amendment Programmatic Agreement of November 13, 2019 and any subsequent future amendments between the SHPO and FEMA will be applied. If applicable stipulations cannot be applied, then consultation with SHPO must occur and any recommendations implemented.
 - a. The Recipient and Subrecipient are responsible for any applicable coordination with the Puerto Rico Institute of Culture for compliance with Commonwealth historic preservation and archaeological requirements.
- 9. **Discovery of Cultural Resources**: If any cultural materials or human remains are discovered during construction, the contractor must halt work immediately and contact FEMA. FEMA staff meeting the Secretary of the Interior's Professional Qualification Standards (48 FR 22716, Sept. 1983) will evaluate the discovery in coordination with SHPO.
- 10. **Construction Material and Debris**: Any materials deposited in eroded embankments must be removed before start of work. The Recipient and Subrecipient are responsible for ensuring that final disposal of bituminous and any non-recyclable debris materials resulting from the restoration and demolition activities must take place at a properly PREQB permitted landfill. If necessary, waste characterization may be required for certain waste

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types (i.e. oil, asbestos, lead-based paint, etc.) and properly disposed. The Recipient and Subrecipient are responsible for obtaining any permits associated with transportation and handling of construction debris.

- 11. **Solid and Hazardous Waste**: The Recipient and Subrecipient will handle, manage, and dispose of all solid and hazardous waste in accordance with requirements of local, state, and federal laws, regulations, and ordinances. In addition, the Recipient and Subrecipient will ensure that all debris is separated and disposed of in a manner consistent with the PREQB guidelines at a permitted site or landfill.
- 12. Clean Air Act: The Recipient and Subrecipient are responsible for complying with applicable EPA and PREQB requirements for low sulfur fuels and fugitive dust suppression.
- 13. **Asbestos and Lead**: The Recipient and Subrecipient are responsible for determining the presence of asbestos or lead containing materials and obtaining applicable permits before beginning work. The Recipient and Subrecipient will identify, handle, transport, and dispose of hazardous materials and/or toxic waste in accordance with PREQB requirements including.
- 14. **Electric Generators**: The Recipient and Subrecipient are responsible for complying with applicable EPA and DRNE/PREQB of Puerto Rico requirements and permits for installation and operation of electric generators.
- 15. **Tree Cutting:** The Recipient and Subrecipient are responsible for complying with applicable DRNE/PREQB of Puerto Rico requirements for planting, pruning, and trimming.
- 16. **Commonwealth Permitting**: The Recipient and Subrecipient are responsible for contacting the Puerto Rico Permit Management Office (OGPe) for any required permits prior to starting work.
- 17. **Invasive Species**: The Recipient and Subrecipient are responsible for restoring disturbed soils with planting native, non-invasive species. Construction equipment should be power washed prior to initial transport to the construction site and prior to changing locations to prevent spread of noxious weeds.

Construction activities shall not start until fifteen (15) days after the date of this Finding of No Significant Impact (FONSI).

7.0 Findings

FEMA has made the determination that Alternative 4, a combination of the Alternatives, best fulfills the purpose and need of this Programmatic EA. In accordance with NEPA and 44 CFR Part 1-0, FEMA has determined that the selected alternative will have no significant adverse impact on the quality of the human environment. As a result of this FONSI, an Environmental Impact

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Statement will not be prepared, and the proposed project as described in the Final PEA may proceed. This FONSI serves as the final public notice for the proposed project.

Signature	
Name	
Infrastructure Branch Director	
Date	
Signature of Authority	
John McKee	
FEMA Region-II Environmental Officer	
Date	